

BioLab / EauLab

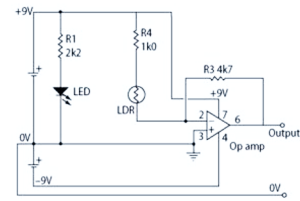
No. 3 2021
Water, Earth Batteries and Ionics
www.asmrstudio.com



4th Water Phase : H₂O to H₃O₂ : Exclusion Zone (EZ) : Quantum Tunneling
All quantum sciences are derived from Quanta (½ a full wave). The smallest measurable unit to electromagnetic waves. Previously known as surface tension, the 4th water phase H₂O₂ and UltraViolet wavelengths (λ) phasten *magnetostatics* through (ρ) Rho^[sup], elevating shaft spin polarity. The dyne is "the force required to accelerate a mass [one gram] at one centimetre per second squared", f=mc². In Broglie's theory (λ = h/p), "p" is momentum and Planck's constant "h" @ 6.626176 x 10⁻³⁴ joule seconds gives way to electric expansion.



ICES, GYPSUMS, TALCS AND SEE TROUGH ROCKS Oxygen and hydrogen atoms resonate into carbon lattice, ice. Sulfur dihydrate scavenges painful hydrogen pars plana vitrectomy retinal and thermal coupling potassium *alum* KAl(SO₄)₂·12(H₂O) *gypsum* CaSO₄·2(H₂O) *selenite* Na₂SeO₃ (resembles sulfur) calcium sulfate hydrate (CaSO₄·2H₂O) all 2^{mo}ls. Talc Mg₃H₂(SiO₃)₄ is 1^{mo}ls. Anoxic black magnetic seeps. Methyl Hydrates. PPM in crystal water is extremely low. Electric and magnetic fields lower natural water surface tensions up to 8% [tsbu.ac.uk : tinyurl.com/y857xum](http://tsbu.ac.uk/~tinyurl.com/y857xum)

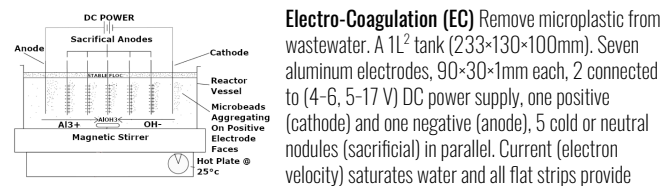


EC/TDS/PPM METER ON LIMITED BUDGET

Total Dissolved Solids is measured as Parts Per Million in a solution. A PPM/TDS meter is an EC meter that converts the EC value into PPM values. Salt levels affect Electrical Conductivity. LDR is a light dependent resistor. LED is a light emitting diode. R1=2k2Ω, R3=4k7Ω, R4=1kΩ. Any Operational Amplifier will do. +9V battery x2.

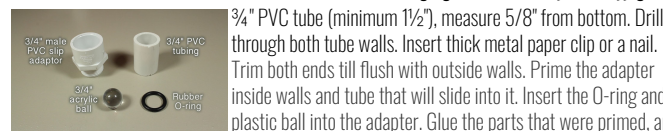
[jagorani.org : tinyurl.com/y62pcdir](http://jagorani.org/~tinyurl.com/y62pcdir)
octiva.net/projects/ppm

0-50	50 - 170	300 - 400	500+ PPM
Reverse Osmosis, Microfiltration, Distillation 0-50 ppm	Spring Water, Carbon Filtered, Aquifers 50 - 170	Unpleasant Water from the tap or mineral springs	Contamination



Electro-Coagulation (EC) Remove microplastic from wastewater. A 1L² tank (233×130×100mm). Seven aluminum electrodes, 90×30×1mm each, 2 connected to (4-6, 5-17 V) DC power supply, one positive (cathode) and one negative (anode), 5 cold or neutral nodules (sacrificial) in parallel. Current (electron velocity) saturates water and all flat strips provide additional ions for flocculant formation. Magnetic stirrer set at 60 rpm, evenly dispersing flocculants. EC system successfully removes organics, particles and opacity, turning lake water transparent. Powered electrodes (+/-) are swapped to prevent pass from forming oxide layers preferentially on one electrode. (See : Gypsum Caverns) pubs.acs.org : tinyurl.com/y66sxyz

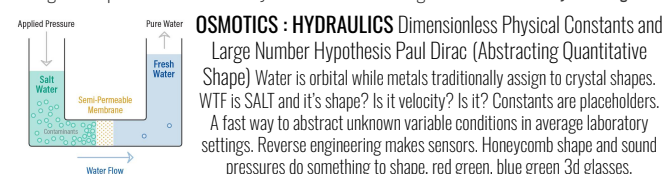
UNIDIRECTIONAL COULER VALVE



slide tube into adapter until nail holes dip below surface. **Note:** Cure cement 2+ hrs. Add electrical tape to one side, similar to the schematic symbol for an electrical diode. Test blowing up a balloon. Place the valve into a bowl of water. If there is any air escaping at all, you will see little bubbles. Used as an air pump, a vacuum pump, or a 5 gallon per minute (gpm) water pump. 60 pounds per square inch (PSI) for normal operation, +60 PSI ball locks in O-Ring. "back-pressure" unlocks. Acrylic ball can shoot at high velocities.



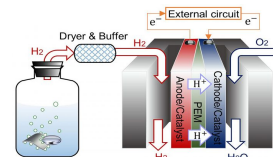
Barometer (Rubber Lid)
tinyurl.com/go9N4n



DO YOU NEED TO KNOW MORE? WWW.ASMRSTUDIO.COM DRDOUBLEDRAGON@GMAIL.COM

Difference Between Gasoline and Hydrogen Engines

youtube.com/watch?v=I6ECwRnJOSg
Surprise! Hydrogen can also serve as fuel for internal combustion engines, emission engines.



Membrane Fuel Cells (PEMFC) Dental glass ionomer cement, polymer electrolytic membrane outs water exhaust, cells stack. Proton antiproton (negatron) pair production. Air intake jets, obsolete hydrogen seeding tanks. pslc.ws/macrog/glass.htm

Electron mass resting is 0.511 MeV. Minimum 1.02 MeV gamma products pair. Excess minus pairs produced by gamma-ray is kinetic energy. Positron-electron nihilates 0.511 MeV photons (photo electrics). Negatron esservescene, hisses ionic sprite lightnings, gush water-rain and ozone, 50 to 90 KM altitude. Galvanic platnized [ferrous] (latin : platniserous) (plastikus : hungarian) silver zinc amalgam "connexion", "hydrogen is given off with a hissing"^[1]. Air is Nitrogen, Oxygen and Hydrogen. Zinc-air commerce battery equals 1.35 V mercury.

(1) Electricity, galvanism, magnetism, electro-magnetism, heat, and the steam engine books.google.ca/books?id=1AoFAAAQAAJ
(2) Characteristics of infrasound from lightning and sprites agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2009JA014700
(3) A Dictionary of chemistry. 1872 By Henry Watts (NO ZINC AIR BAT DISCOVERED YET) books.google.ca/books?id=eYDAAAQAAJ
(4) December 6, 1957 <http://www.pnas.org/content/pnas/44/2/105.full.pdf>

Elipson Magnetic Anode Nitrogen (Sigma)
Theta Ionic Cathode Argon (Theta)

Magnetic Hydrogen Atoms and Non-Magnetic Molecules
ncbi.nlm.nih.gov/pmc/articles/PMC1085019/
0.94% of the Earth's atmosphere is Argon, the 3rd most ample gas. In Biotite 4th water state.

scitechdaily.com/eco-friendly-fuel-cells-powered-by-instant-hydrogen-production/



youtu.be/klpTK-b_ySI



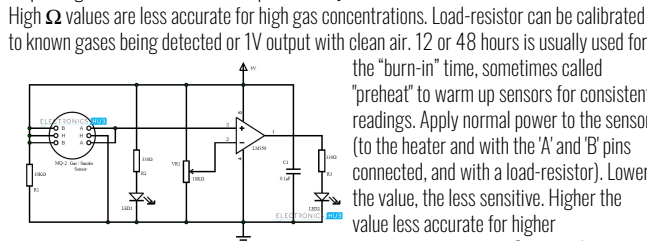
Hydrogen Fuels and Gamma Ray Engines

Using screws to puncture a glass jar metal lid, attach metal disc plates through screws, create wafers, fill with water, close the lid, and join battery (6V+) anode(-) and cathode(+) wires to screws. Electrolysis releases hydrogen gas. Catch the hydrogen by running a hose through a water pot container up into an inverted bottle. Hydrogen is less dense than air, so keep the bottle upside down to prevent gas escaping. This fuel can be used to supplement petrol gas in combustion engines increasing mileage.

Metal Oxide Semiconductor (MOS) Gas Sensor "Chemiresistors"

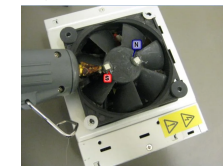
MOS changes resistance when the Gas contacts conductive material using a small heater inside an electro-chemical sensor. Metal Oxide Gas Sensors are low cost, flexible, simple.

"MQSeries" detect LPG, Carbon Monoxide (CO), Methane, Smoke, Alcohol, etc... Connect both 'A' and both 'B' pins together. or use a variable resistor. Fixed value resistor used in most cases. Sensor needs a 2kΩ to 47kΩ load-resistor at output to ground. Low Ω values, drop sensitivity. High Ω values are less accurate for high gas concentrations. Load-resistor can be calibrated to known gases being detected or 1V output with clean air. 12 or 48 hours is usually used for the "burn-in" time, sometimes called "preheat" to warm up sensors for consistent readings. Apply normal power to the sensor (to the heater and with the 'A' and 'B' pins connected, and with a load-resistor). Lower the value, the less sensitive. Higher the value less accurate for higher concentrations of gas. Output voltage can

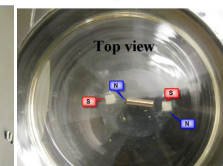


directly be given to any Analog to Digital converter (ADC) or any comparator circuit. Accordingly the gas value can be calculated using a lookup table. Sensors connect to Analog to Digital Converter ADC or Arduino micro controllers.

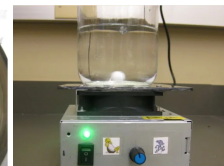
Magnetic Stirrer (From ATX Tower Computer)



Glue Two Magnets to Fan to make magnetic stirrer



Magnet in pyrex or corning ware water vessel.



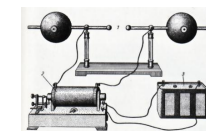
Magnet in pyrex or corning ware water vessel.

NOTE: Striking metal along metal will magnetize rod. Kinetic vibrations shake atoms to line in magnetic fields. Ferrous metal is attracted to magnets. Rub repeatedly in one direction only. Ferromagnetic material is iron (Chemical Symbol Fe for ferrous). wikihow.com/Magnetize-Steel

Make a Voltmeter

instructables.com/id/Make-a-voltmeter/
(sometimes called galvanometer)

You'll need: Cardboard, A small but powerful magnet, Magnet wire, the thinner the better, A pin. The magnet is glued to the wand meter base. The magnet wire is wrapped around cardboard and two wire ends attached to the battery. A magnetic field then pushes the wand meter. Calibrate the cardboard to 9V batteries and others. Optionally, add a double pole double throw (DPDT) switch to rock back and forth between battery and voltmeter probes.



Spark Gap Zoetrope

Hertz's first radio transmitter: a dipole resonator consisting of a pair of one meter copper wires ending in 30 cm zinc spheres. When an induction coil applied a high voltage between the two sides, sparks across the center spark gap created standing waves of radio

frequency current in the wires, which radiated radio waves. The frequency of the waves was roughly 50 MHz, about that used in modern television transmitters.

physics.stackexchange.com/questions/313997/how-does-the-hertz-ossillator-create-radio-waves



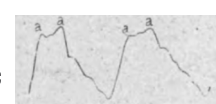
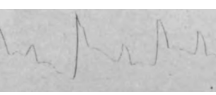
MEDICAL BATTERIES : 1894 ALLIED SCIENCES

By George Milbry Gould

books.google.ca/books?id=1c0QAQAAQAAJ

Dietary zinc physio electric signal in biology. PQRST mnemonic used in bioelectric signals. Mercurial kinetic photography and tracings 18th c. jamanetwork.com/journals/jama/article-abstract/222671

capital "A" is a symbol for *argon*; also abbreviation for *accommodation*, *acetum*, *anode* and *anterior*; and that little "a" is (1) an abbreviation for *accommodation*, *ampere*, *anode*, *anterior*, *agua*, *water*, and *arteria*; (2) symbol for *total acidity*.



NAMES, ELEMENTS, FLUIDS, ETC., OF THE PRINCIPAL BATTERIES

CELL NAME	Elements (+)(-)	Exciting Agent	Depolarizing Agent	E.M.F. in Volts
Bunsen	Zinc(+) Carbon(-)	Sulphur	Nitrogen	1.75 to 1.96
Beetz	Zinc(+) Copper(-)	Sulphur	Nitrogen	1.04
Callaud	Zinc(+) Copper(-)	Sulphur	Nitrogen	1.0 to 1.14
Daniel	Zinc(+) Copper(-)	Sulphur	Nitrogen	1.1 to 1.14
Edison-Lalande	Zinc(+) Cupric Oxide and carbon(-)	Potassium Hydroxide	Cupric Oxide	0.75
Fuller	Zinc(+) Carbon(-)	Zinc chlorid	Potassium dichromate and hydrochloric acid (gly stomach acid)	1.5
Gaiffe	Zinc(+) Silver(-)	Zinc chlorid	Silver chlorid	1.02
Grenet	Zinc(+) Carbon(-)	Sulphur and Potassium Dichromate	Chromic acid (similar to phosphoric)	2.0
Grove	Zinc(+) Platinum(-)	Sulphur	Nitrogen	1.94 to 1.97
Latimer Clark	Zinc(+) Mercury(-)	Mercury Sulphate	Mercury Sulphate	1.436
Leclanche	Zinc(+) Carbon(-)	Ammonium chlorid	Manganese dioxid	1.42
Lelande Chaperone	Zinc(+) Copper or iron(-)	Potassium hydroxide	Cuprite Oxide	0.98
Maische	Zinc scraps in mercury bath(-) Platinized Carbon(-)	Common Salt Solution	None Separate	1.25
Marie Davy	Zinc(-) Carbon (+)	Sulphur	Mercuric Sulphate	1.52

